



Testimony

Before the Subcommittee on Forests and Forest Health, Committee on Resources, House of Representatives

For Release on Delivery Expected at 10 a.m. EDT Tuesday August 4, 1998

FEDERAL LANDS

Wildfire Preparedness and Suppression Expenditures for Fiscal Years 1993 Through 1997

Statement of Barry T. Hill, Associate Director Energy, Resources, and Science Issues, Resources, Community, and Economic Development Division



19980819 067

DTIC QUALITY INSPECTED 1

Madam Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss wildfire expenditures of the major federal land management agencies: the Forest Service, the Bureau of Land Management, the National Park Service, the Bureau of Indian Affairs, and the Fish and Wildlife Service. As requested, we will present information on (1) the amount of funds expended on wildfire preparedness and suppression activities and the types of activities covered by these expenditures and (2) assistance provided to state firefighting efforts by the land management agencies. Our comments today are based on the two reports we issued to you and the Chairman of the House Resources Committee. The information in those reports is based on financial and program data supplied by the federal land management agencies for fiscal years 1993 through 1997.

In summary, the federal land management agencies:

- expended about \$4.4 billion on wildfire activities for fiscal years 1993
 through 1997. Included in this amount was about \$2.1 billion for
 preparedness activities and about \$2.3 billion for wildfire suppression. For
 both preparedness and suppression, the largest expenditure categories
 were personnel, and services and supplies, and
- for fiscal years 1993 through 1997, the five land management agencies provided assistance to state and local firefighting efforts through cooperative agreements, provided grants valued at about \$83 million, and loaned excess federal property worth about \$700 million.

Wildfire preparedness expenditures increased slightly during the reporting period because, by their very nature, they can be planned, while suppression expenditures varied greatly because they are directly related to the number and intensity of wildfires in a given year. For example, in fiscal year 1996, about 20,000 wildfires burned almost 4 million acres, resulting in total wildfire suppression expenditures of about \$689 million; whereas, wildfire suppression expenditures declined to about \$281 million

Page 1 GAO/T-RCED-98-247

¹Federal Lands: Information About Land Management Agencies' Wildfire Preparedness Activities (GAO/RCED-98-48R, Dec. 18, 1997) and Federal Lands: Land Management Agencies' Wildfire Suppression Expenditures (GAO/RCED-98-140R, Apr. 10, 1998).

²The report on wildfire preparedness activities covered the period fiscal years 1992 through 1996, because, at the time of that review, fiscal year 1997 data were not available. We have updated the preparedness data for this testimony to include the period fiscal years 1993 through 1997, which is consistent with the data in our report on wildfire suppression expenditures.

in fiscal year 1997 when only about 14,000 wildfires consumed about 2 million acres.

I will now discuss, in detail, the major categories of wildfire expenditures by the federal land management agencies and the types of assistance provided to states.

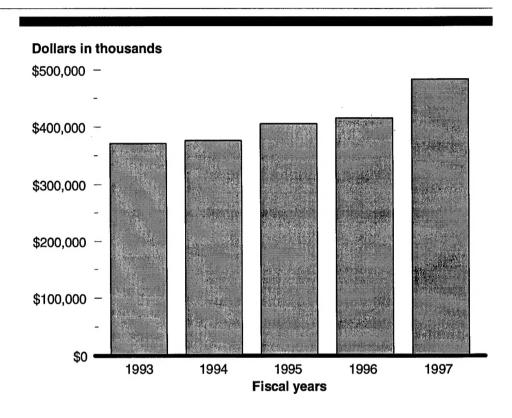
Wildfire Preparedness and Suppression Activities

Wildfire preparedness activities are those activities undertaken before the actual onset of a wildfire. Such activities include the land management agencies providing fire management programs through training, planning, staffing, and providing firefighting equipment. Wildfire preparedness also includes programs to reduce flammable materials on the forest floor, such as fallen trees and dry underbrush.

Suppression activities include actions taken to put out wildfires, including the use of firefighting personnel and equipment. Suppression activities also include emergency rehabilitation following a wildfire. Various rehabilitation actions are carried out to prevent land degradation, resource losses, soil erosion, or other conditions or damage caused by wildfires.

For fiscal years 1993 through 1997, the land management agencies spent about \$2.1 billion on wildfire preparedness activities. As shown in figure 1, total expenditures for wildfire preparedness activities increased slightly during the period, from about \$371 million in fiscal year 1993 to about \$483 million in fiscal year 1997.

Figure 1: Total Wildfire Preparedness Expenditures for Fiscal Years 1993 Through 1997



During fiscal years 1993 through 1997, the Forest Service, spent the most on wildfire preparedness activities, about \$1.4 billion, followed by the Bureau of Land Management at about \$350 million.

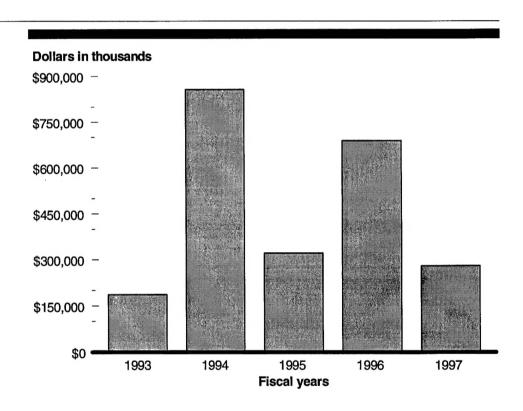
For this period, the largest preparedness expenditures were for personnel—about \$1.2 billion. Personnel costs include salary and benefits for full-time employees and salaries for part-time employees. This includes permanent employees, as well as seasonal and temporary ones, hired in anticipation of actually fighting wildfires when they occur.

The second largest expenditure category was services and supplies—about \$541 million. This category includes contracts for airplanes, helicopters, and personal services; maintenance contracts for equipment; office supplies; and fuel for vehicles and aircraft. As with some personnel expenditures, some expenditures for services and supplies were also made in anticipation of actually using them when wildfires occur.

Page 3 GAO/T-RCED-98-247

For fiscal years 1993 through 1997, the land management agencies spent about \$2.3 billion on wildfire suppression activities. The acreage consumed by wildfires varied greatly from year to year. Similarly, as shown in figure 2, total wildfire suppression expenditures varied greatly during the reporting period ranging from a low of about \$187 million in fiscal year 1993 to a high of about \$858 million in fiscal year 1994.

Figure 2: Total Wildfire Suppression Expenditures for Fiscal Years 1993 Through 1997



During fiscal years 1993 through 1997, the Forest Service spent the most on wildfire suppression activities, about \$1.7 billion, followed by the Bureau of Land Management at about \$360 million. For this period, the largest category of expenditures was for services and supplies—about \$1.2 billion. These expenditures included the actual costs of aircraft for fighting the wildfires, the costs of contracts to maintain all types of equipment, the costs of feeding firefighting personnel, and the costs of fuel for vehicles and aircraft.

The second largest expenditure category was personnel—about \$941 million. These expenditures included the hazard pay and overtime costs of permanent, temporary, and seasonal employees when they were actually fighting wildfires.

Other major categories of expenditures for both wildfire preparedness and suppression activities included: travel; rent, communications, and utilities; transportation of things; grants and claims; and equipment, land, and structures. (See app. I for details on the total amount of wildfire preparedness and suppression expenditures for each of the land management agencies, as well as, a description of the amounts of these expenditures by category for each agency.)

Assistance Provided to State Firefighting Efforts

All of the land management agencies enter into cooperative agreements with state and local entities for wildfire activities. In addition, the Forest Service has two grant programs to provide states with funds for wildfire preparedness activities and a program to loan excess federal equipment to state governments for firefighting purposes.

The activities covered by these grants and cooperative agreements include fire prevention, environmental education, training, and developing procedures for fighting fires. The agencies do not charge each other for these services. Federal and state fire agencies also work cooperatively through the Wildfire Coordinating Group to establish common standards on a wide variety of items,³ such as position qualifications, training, communications, fire behavior predictions, and fire weather forecasting.

The Forest Service administers two grant programs authorized by the Cooperative Forestry Assistance Act of 1978 that provide funds to states for wildfire preparedness activities—the Rural Fire Prevention and Control and the Rural Community Fire Protection grant programs. ⁴ Both grant programs are matching programs, that is, the entities receiving the grants must match them in dollar amounts or in-kind contributions. For fiscal years 1993 through 1997, the Forest Service provided a total of about \$69 million to the states through these two grant programs.

Page 5 GAO/T-RCED-98-247

³The Wildfire Coordinating Group consists of representatives from each of the federal land management agencies and state foresters.

⁴The Rural Community Fire Protection Program was originally authorized by the Rural Development Act of 1972. The Cooperative Forestry Assistance Act of 1978 repealed this provision of the 1972 act and authorized the Rural Community Fire Protection Program under the 1978 act.

Moneys from both of the above grant programs were used to enhance state and local firefighting capabilities. For example, Georgia received, in fiscal year 1997, about \$428,500 to, among other things, update state, district, and county strategic fire plans; provide smoke management training to ensure that prescribed burning can continue; train and equip Georgia Forestry Commission personnel; and provide a basic rural fire protection course to local fire departments.

Similarly, in fiscal year 1997, Idaho received about \$323,000 from the grant programs. Idaho used its moneys to, among other things, prepare a statewide fire report, pay for personnel at two dispatch centers, pay the state's portion of the cost of a fire retardant aircraft, provide personal protective fire safety equipment to fire districts, and train personnel in structural and wildland fire control techniques. The Forest Service also manages the Federal Excess Personal Property Program,⁵ which loans excess federal property to state and local firefighters. Under this program, administered by state foresters, excess federal property (generally from the Department of Defense) that can be used directly in firefighting or converted to firefighting use can be loaned to states. The types of excess property loaned range from shovels to helicopters; most are trucks that can be readily converted to tankers or pumpers. Other common items loaned include generators, pumps, fire hoses, breathing apparatus, and personal protective clothing. During fiscal years 1993 through 1997, the Forest Service loaned excess federal personal property valued at about \$700 million to states for use in wildfire preparedness activities.

From lists of excess federal property maintained by the General Services Administration, states identify excess property they want to borrow. The states are responsible for removing the excess property, refurbishing it, and keeping track of its location. When a state no longer needs the loaned property, it is returned to the Forest Service for disposal or re-loaned to another state.

According to the Forest Service, most of the excess property loaned to the states is in poor condition and requires extensive rehabilitation to convert it into firefighting equipment. The cost of converting the excess property is, however, much less than the cost to purchase new equipment, and the states use some of their grant moneys to rehabilitate the loaned property.

Page 6 GAO/T-RCED-98-247

⁵The Federal Excess Personal Property Program is authorized by section 203 of the Department of Agriculture Organic Act of 1944, the Federal Property and Administrative Services Act of 1949, and section 10 of the Cooperative Forestry Assistance Act of 1978.

The loaned property can become important firefighting tools for local fire departments. For example, Wyoming state fire personnel, in November 1994, received 31, 2-1/2 ton trucks and two air compressors. Within weeks, one local fire department was able to use one of the excess trucks that had been converted into a 1,000-gallon wildland firefighting engine, and one Wyoming county built a compressed air foam system on an excess military truck at a cost of \$58,000; purchasing a new commercial engine would have cost between \$175,000 and \$200,000.

Madam Chairman, this concludes my statement. We would be happy to respond to any questions that you or other Members of the Subcommittee may have.

Page 7 GAO/T-RCED-98-247

Wildfire Expenditures, Fiscal Years 1993 Through 1997

Table I.1: Land Management Agencies' Wildfire Expenditures, Fiscal Years 1993 Through 1997

Dollars in thous	sands					
			Fiscal year			
Agency	1993	1994	1995	1996	1997	5-year total
Forest Service)					
Preparedness	\$247,678	\$260,200	\$287,018	\$287,906	\$326,146	\$1,408,948
Suppression	121,383	690,930	197,573	524,825	178,095	1,712,806
Bureau of Lan	d Managen	nent				
Preparedness	68,707	61,493	66,998	66,880	86,410	350,488
Suppression	40,339	97,115	63,792	98,433	60,305	359,984
National Park	Service					
Preparedness	15,427	15,344	13,559	19,465	18,584	82,379
Suppression	5,006	14,104	21,257	19,891	6,845	67,103
Bureau of Indi	ian Affairs					
Preparedness	24,230	25,112	24,133	25,704	34,322	133,501
Suppression	18,969	52,417	37,753	43,510	32,770	185,419
Fish and Wild	life Service					
Preparedness	15,244	14,242	13,745	15,320	17,875	76,426
Suppression	1,616	3,281	1,675	2,643	2,685	11,900
Total ^a	\$558,599	\$1,234,238	\$727,503	\$1,104,577	\$764,037	\$4,388,954

Note: The suppression expenditures shown in this and all following tables include funds spent on both suppression and emergency rehabilitation activities.

Page 8 GAO/T-RCED-98-247

^aThese totals do not include about \$83 million in grants to states for wildfire preparedness activities.

Table I.2: Land Management Agencies' Wildfire Expenditures by Category, Fiscal Years 1993 Through 1997

Dallana in the sur									
Dollars in thous	sands								
Expenditure			Fiscal year						
category	1993	1994	1995	1996	1997	5-year total			
Personnel cos	Personnel costs								
Preparedness	\$218,180	\$225,104	\$240,232	\$250,674	\$292,540	\$1,226,730			
Suppression	79,180	338,484	141,614	264,605	116,832	940,715			
Travel									
Preparedness	10,872	10,827	12,954	10,347	15,883	60,883			
Suppression	3,876	27,453	11,728	24,778	6,017	73,852			
Transportation	1								
Preparedness	4,832	5,125	5,314	4,651	5,242	25,164			
Suppression	3,945	13,388	4,422	7,548	2,886	32,189			
Rent, commun	nications, a	nd utilities							
Preparedness	11,324	13,434	13,443	15,326	16,578	70,105			
Suppression	3,226	23,754	7,109	13,124	2,543	49,756			
Services and	supplies								
Preparedness	103,211	96,127	106,709	108,703	126,625	541,375			
Suppression	94,274	456,857	147,217	363,817	140,145	1,202,310			
Equipment, la	nd, and str	uctures							
Preparedness	17,464	17,242	19,412	18,549	23,593	96,260			
Suppression	681	2,548	1,488	1,535	1,482	7,734			
Grants and cla	aimsª								
Preparedness	2,809	2,440	3,160	4,216	960	13,585			
Suppression	933	1,473	6,453	4,935	5,404	19,198			
Other ^b									
Preparedness	2,594	6,092	4,229	2,809	1,915	17,639			
Suppression	1,198	-6,110 ^c	2,018	8,959	5,392	11,457			
Totald	\$558,599	\$1,234,238	\$727,502	\$1,104,576	\$764,037	\$4,388,952			

^aThese totals do not include about \$83 million in grants to states for wildfire preparedness activities.

^bOther expenditures included, among other things: loans/investments, refunds, and internal transactions. Because these preparedness expenditures were relatively small, we combined them for reporting purposes.

^cThe negative amount reflects reimbursements from state or local entities that could not be assigned an expenditure category related to the original expenditure.

^dTotals sometimes do not exactly equal those in table I.1 because of rounding.

Table I.3: Land Management Agencies' Wildfire Expenditures for Personnel Costs, Fiscal Years 1993 Through 1997

Dollars in thous	sands					
Agency	1993	1994	1995	1996	1997	5-year total
Forest Service)					
Preparedness	\$152,554	\$158,152	\$171,806	\$179,138	\$201,923	\$863,573
Suppression	50,804	257,461	86,939	188,277	68,385	651,866
Bureau of Lan	d Managem	ent				
Preparedness	40,107	40,252	40,956	42,329	48,108	211,752
Suppression	15,441	36,427	25,842	40,042	22,514	140,266
National Park	Service					
Preparedness	8,219	8,754	9,450	10,769	12,435	49,627
Suppression	2,754	9,826	10,518	8,911	3,830	35,839
Bureau of Ind	ian Affairs					
Preparedness	10,266	10,776	10,683	10,465	20,395	62,585
Suppression	9,400	32,562	17,132	25,609	20,367	105,070
Fish and Wild	life Service					
Preparedness	7,034	7,170	7,337	7,973	9,679	39,193
Suppression	781	2,208	1,183	1,766	1,736	7,674
Total	\$297,360	\$563,588	\$381,846	\$515,279	\$409,372	\$2,167,445

Note: Personnel expenditures include salary and benefit costs for full-time employees and salary costs for part-time employees.

Page 10 GAO/T-RCED-98-247

Table I.4: Land Management Agencies' Wildfire Expenditures for Travel, Fiscal Years 1993 Through 1997

Dollars in thous	ande					
Donars In thous	dilus	F	iscal year			
Agency	1993	1994	1995	1996	1997	5-year total
Forest Service						
Preparedness	\$7,017	\$7,222	\$8,981	\$6,792	\$10,613	\$40,625
Suppression	2,719	23,176	8,636	20,723	4,260	59,514
Bureau of Lan	d Manageme	ent				
Preparedness	1,714	1,490	1,890	1,406	2,446	8,946
Suppression	338	2,425	865	2,455	920	7,003
National Park	Service					
Preparedness	1,091	1,040	972	1,144	1,570	5,817
Suppression	176	560	861	659	306	2,562
Bureau of India	an Affairs					
Preparedness	414	465	492	433	477	2,281
Suppression	570	1,077	1,271	716	479	4,113
Fish and Wildl	ife Service					
Preparedness	636	610	619	572	777	3,214
Suppression	73	215	95	225	52	660
Total	\$14,748	\$38,280	\$24,682	\$35,125	\$21,900	\$134,735

Note: Travel includes the costs incurred while persons are on travel status, such as per diem and cost of transportation, lodging, and rental vehicles.

Table I.5: Land Management Agencies' Wildfire Expenditures for Transportation Costs, Fiscal Years 1993 Through 1997

Dollars in thousa	ands					
		F	iscal year			
Agency	1993	1994	1995	1996	1997	5-year total
Forest Service						
Preparedness	\$1,533	\$1,740	\$2,090	\$1,772	\$2,074	\$9,209
Suppression	2,110	10,478	2,156	4,581	662	19,987
Bureau of Land	i Manageme	ent				
Preparedness	1,868	1,842	1,759	1,340	1,932	8,741
Suppression	1,335	2,410	1,646	2,320	1,539	9,250
National Park S	Service					
Preparedness	412	364	395	480	490	2,141
Suppression	56	68	89	92	64	369
Bureau of India	an Affairs					
Preparedness	934	1,085	925	852	619	4,415
Suppression	442	432	· 532	554	619	2,579
Fish and Wildli	fe Service					
Preparedness	85	94	145	207	127	658
Suppression	2	0	-1	1	2	4
Total	\$8,777	\$18,513	\$9,736	\$12,199	\$8,128	\$57,353

Note: Transportation of things includes the costs to rent commercial vehicles, parcel post costs, and costs to transport household goods for a change of duty station.

Page 12 GAO/T-RCED-98-247

Table I.6: Land Management Agencies' Wildfire Expenditures for Rents, Communications, and Utilities, Fiscal Years 1993 Through 1997

Dollars in thous	ands					
		F	iscal year			
Agency	1993	1994	1995	1996	1997	5-year total
Forest Service						
Preparedness	\$9,222	\$11,697	\$11,719	\$13,644	\$14,609	\$60,891
Suppression	2,220	18,493	2,774	8,485	1,172	33,144
Bureau of Land	d Manageme	ent				
Preparedness	1,652	1,294	1,324	1,257	1,445	6,972
Suppression	760	4,292	2,520	2,738	723	11,033
National Park	Service					
Preparedness	88	94	74	87	103	446
Suppression	13	380	1,359	582	346	2,680
Bureau of India	an Affairs					
Preparedness	238	261	197	216	255	1,167
Suppression	223	578	455	1,312	292	2,860
Fish and Wildl	ife Service					
Preparedness	124	88	129	122	166	629
Suppression	10	11	1	7	10	39
Total	\$14,550	\$37,188	\$20,552	\$28,450	\$19,121	\$119,861

Note: Included in rent, communications, and utilities are charges for rent paid to the General Services Administration or commercial real estate operators, charges for telephones and other communication services, postage, computer and copier equipment rental, and utility charges.

Page 13 GAO/T-RCED-98-247

Table I.7: Land Management Agencies' Wildfire Expenditures for Services and Supplies, Fiscal Years 1993 Through 1997

Dollars in thous	sands					
Agency	1993	1994	1995	1996	1997	5-year total
Forest Service)	•		•		
Preparedness	\$67,387	\$66,203	\$75,330	\$73,841	\$80,938	\$363,699
Suppression	62,043	385,312	90,223	292,152	95,413	925,143
Bureau of Lan	d Managem	ent				
Preparedness	20,080	13,865	18,909	18,441	25,687	96,982
Suppression	22,222	50,841	32,423	50,190	33,264	188,940
National Park	Service					
Preparedness	4,043	3,104	1,449	3,460	2,928	14,984
Suppression	1,984	3,231	8,353	9,548	2,274	25,390
Bureau of Indi	ian Affairs					
Preparedness	7,638	8,847	7,568	9,075	12,537	45,665
Suppression	7,378	16,655	15,836	11,301	8,504	59,674
Fish and Wild	life Service					
Preparedness	4,063	4,108	3,453	3,886	4,535	20,045
Suppression	647	818	382	626	690	3,163
Total	\$197,485	\$552,984	\$253,926	\$472,520	\$266,770	\$1,743,685

Note: Services and supplies include expenditures for, among other things, maintenance contracts on equipment; various contracts for airplanes and helicopters, personal services, and research; office supplies; fuel for vehicles and aircraft; and commercial printing and reproduction.

Page 14

Appendix I Wildfire Expenditures, Fiscal Years 1993 Through 1997

Table I.8: Land Management Agencies' Wildfire Expenditures for Equipment, Land, and Structures, Fiscal Years 1993 Through 1997

Dollars in thous	ands					,
_		F	iscal year			
Agency	1993	1994	1995	1996	1997	5-year total
Forest Service			2 7			
Preparedness	\$6,986	\$8,473	\$12,570	\$9,541	\$13,452	\$51,022
Suppression	239	1,627	736	650	214	3,466
Bureau of Land	d Manageme	ent				
Preparedness	3,226	2,692	2,150	2,098	6,779	16,945
Suppression	237	712	478	676	1,165	3,268
National Park	Service					
Preparedness	1,574	1,983	1,150	3,362	982	9,051
Suppression	10	20	70	93	28	221
Bureau of India	an Affairs					
Preparedness	2,545	2,218	1,662	1,201	41	7,667
Suppression	187	187	202	113	41	730
Fish and Wildli	ife Service					
Preparedness	3,133	1,876	1,880	2,347	2,339	11,575
Suppression	8	2	2	3	34	49
Total	\$18,145	\$19,790	\$20,900	\$20,084	\$25,075	\$103,994

Note: Equipment, land, and structure expenditures include: capitalized and noncapitalized equipment; easements; and buildings and other structures, such as roads.

Page 15 GAO/T-RCED-98-247

Table I.9: Land Management Agencies' Wildfire Expenditures for Grants and Claims, Fiscal Years 1993 Through 1997

Dollars in thousa	nds					
		Fi	iscal year			
Agency	1993	1994	1995	1996	1997	5-year total
Forest Service						
Preparedness	\$385	\$622	\$294	\$372	\$637	\$2,310
Suppression	64	514	4,092	998	2,599	8,267
Bureau of Land	Manageme	nt				
Preparedness	60	58	11	8	13	150
Suppression	7	7	17	11	178	220
National Park S	ervice					
Preparedness	0	4	68	162	56	290
Suppression	-1	-1	5	5	-3	5
Bureau of India	n Affairs					
Preparedness	2,195	1,460	2,606	3,462	2	9,725
Suppression	769	926	2,325	3,906	2,468	10,394
Fish and Wildlif	e Service					
Preparedness	169	296	181	212	252	1,110
Suppression	94	27	14	15	162	312
Totala	\$3,742	\$3,913	\$9,613	\$9,151	\$6,364	\$32,783

^aThese totals do not include about \$83 million in grants to states for wildfire preparedness activities.

Note: Grants and claims expenditures would include cooperative agreements and insurance claims.

(141205) Page 16 GAO/T-RCED-98-247

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. VISA and MasterCard credit cards are accepted, also. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office P.O. Box 37050 Washington, DC 20013

or visit:

Room 1100 700 4th St. NW (corner of 4th and G Sts. NW) U.S. General Accounting Office Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (202) 512-6061, or TDD (202) 512-2537.

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

For information on how to access GAO reports on the INTERNET, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web Home Page at:

http://www.gao.gov

